



L E S E R I E S

# LE700



The Martin Audio LE700 is designed to overcome many of the problems associated with normal stage monitor systems.

In short, the LE700 utilises differential dispersion horn techniques to define a constant sound pressure level area in which the artist may move. In this area the frequency response and tonal characteristics remain unchanged.

The benefits of this technology are two fold. Firstly the monitor engineer can plan EQ set ups confident that the performers movement window will have no problematic frequency changes causing feedback. This allows higher sound pressure levels with less EQ.

Secondly, the performer can move further away from the monitor whilst continuing to receive information from the monitor which will cut through the highest on stage ambient volume levels.

## FEATURES

Differential Dispersion Horn

High Power 15" Diameter 4" Coil Bass Driver

Two-Way Active System for Maximum Performance

Compact Twin Angled Enclosure

1.4" Titanium Diaphragm Compression Driver

Left and Right Handed Capability

This differential dispersion technology creates a horn which progressively varies its horizontal dispersion from wide to narrow, the further the performer moves away from the monitor. This narrowing of dispersion effectively changes the forward gain of the horn, this increase in the forward gain enables the monitor to throw further, increasing the effective operating range of the monitor, whilst reducing excess spill.

The compression driver employed is a 1.4 inch titanium diaphragm proprietary unit. This provides high power handling with extended high frequency reproduction.

The bass driver is a high power, 15" diameter 4" coil transducer. The unit is active, two-way utilising a dedicated version of the Martin Audio MX4 system controller. The LE700 is packaged in a twin angled ported enclosure, designed to provide maximum performance within a small volume. Fitted with both EP8 and Speakon connectors it provides high power monitoring for professional applications.

## APPLICATIONS

High Power Stage Monitoring

# ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The loudspeaker system shall be a wedge profile monitor for on stage foldback. It shall be operated in conjunction with a separate electronic system controller and bi-amped.

The low frequency transducer shall be a 15" diameter 4" voice coil cone transducer, bass reflex loaded.

The high frequency unit shall consist of a 1.4" exit diameter, 3" voice coil titanium diaphragm compression driver mounted on a differential dispersion, low edge diffraction horn flare. The high frequency transducer shall be protected by an internally mounted high pass filter.

The loudspeaker system shall be mounted in an 18mm birch plywood, black texture painted enclosure. The horn flare and cone transducer shall be mounted on a rotatable baffle to facilitate left and right handed operation. The enclosure shall be protected by a steel perforated grille and be fitted with two carrying handles at each end.

The performance of the loudspeaker system together with the dedicated MX4 controller shall meet or exceed the following specifications.

Frequency response measured one metre on axis shall be 60 - 15000 Hz +/- 3 dB.

The power handling shall be 300W R.M.S., 600W programme for the low frequency transducer, and 75W R.M.S., 150W programme for the high frequency transducer.

The sensitivity measured at one metre, one Watt input in half space conditions using band limited pink noise shall be 98dB low frequency, 103 - 109dB (106dB on ref axis) high frequency.

The maximum SPL measured at one metre on axis, using band limited pink noise shall be 123dB continuous, 129dB peak.

The high frequency dispersion at the -6dB points shall be 50 -100 degs horizontal x 70 degs vertical.

The nominal impedance shall be 8 Ohm low frequency, 16 Ohm high frequency.

The recommended electronic system controller crossover point shall be 1000Hz, -3dB L-R slope.

The connectors shall be 2 x Speakon, 1 x EP8.

Dimensions shall be (W) 710mm x (H) 495mm x (D) 375mm  
The weight shall be 44kg.

The loudspeaker system shall be the Martin Audio LE700.

## SPECIFICATIONS

<b>TYPE</b>	Two way active high power stage monitor
<b>BANDWIDTH</b>	60Hz - 15kHz +/- 3dB via MX4 controller
<b>DRIVERS</b>	15" diameter 4" voice coil cone transducer 1.4" exit titanium compression driver
<b>RATED POWER</b>	(LF) 300W R.M.S., 600W programme (HF) 75W R.M.S., 150W programme
<b>RECOMMENDED AMPLIFIER</b>	500W - 800W R.M.S. into 4 Ohms
<b>SENSITIVITY</b>	LF 98dB/HF 106dB 1 Watt/1 metre
<b>MAXIMUM SPL</b>	LF 123dB continuous, 129dB peak HF 125dB continuous, 131dB peak
<b>IMPEDANCE</b>	(LF) 8 Ohms nominal (HF) 16 Ohms nominal
<b>DISPERSION (-6dB points)</b>	50-100 degs horizontal 70 deg vertical
<b>CROSSOVER</b>	1000Hz

<b>ENCLOSURE</b>	80 Litre
<b>FINISH</b>	Textured black paint
<b>PROTECTIVE GRILLE</b>	Perforated steel, black painted with 48% free air flow
<b>CONNECTORS</b>	2 x Speakon, 1 x EP8
<b>FITTINGS</b>	2 Handles
<b>DIMENSIONS</b>	(W) 710mm x (H) 495mm x (D) 375mm (W) 27.9ins x (H) 19.5ins x (D) 14.8ins
<b>WEIGHT</b>	44kg (97lbs)
<b>SHIPPING DIMENSIONS</b>	(W) 870mm x (H) 625mm x (D) 540mm (W) 34.2ins x (H) 24.6ins x (D) 21.3ins
<b>SHIPPING WEIGHT</b>	49kg (108lbs)

### NOTES

1. Sensitivity measured in half-space conditions at 1 metre with 2.83V input, using band limited pink noise.
2. SPL measured at 1 metre using band limited pink noise.

Trade Descriptions Act: Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice. Martin Audio is committed to refining the state of the art sound reinforcement combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.



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